

REMARKS

Claims 1, 13-15, 20, 22, 29, 48 and 50 have been cancelled. Claims 4, 5, 8, 16-19, 23-28, and 30 have been amended. New claims 78-105 have been added. Thus, claims 4-11, 16-19, 23-30, and 78-105 are currently pending in the application. Reconsideration of the application is respectfully requested in view of the foregoing amendments and the following remarks.

Claim Rejections – 35 U.S.C. 103

Claims 1, 4-11, 13, 18-20, 22-30, 48 and 50 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,888,322 issued to Dowling et al. (hereinafter “Dowling”). Dowling describes, “A color-changing device which includes an enclosure at least a portion of which is material which is desired to change color (See Abstract).” Claims 14-17 were rejected under 35 U.S.C. 103(a) as being unpatentable over Dowling in view of U.S. Patent No. 6,030,088 issued to Scheinberg et al. (hereinafter “Scheinberg”).

Previously presented independent claims 1, 13, 29 and 48 have been cancelled. Various previously presented dependent claims have been amended to be dependent upon new independent claim 78, which recites:

A computing device, comprising:

a housing, the housing having an outer surface at least a portion of which is capable of being illuminated by light from an inner surface of the housing, the housing being configured to enclose at least one internal component associated with an operation of the computing device;

a shaped object positioned within the housing in proximity to the inner surface of the housing corresponding to the portion which is capable of being illuminated by light; and

a controllable light emitting device disposed inside the housing, the light emitting device being configured to produce an adjustable shaped light effect for colorizing or patterning the portion of the housing capable of being illuminated by light in order to alter the ornamental appearance of the housing of the computing device, the light emitting device including

an enclosed light source configured to generate the light,

a flexible light pipe for redirecting substantially all of the light from the enclosed light source regardless of where the light source is positioned within the housing so as to illuminate an inner surface of the shaped object so as to produce an illuminated shaped object that is visible from the outer surface of the housing.

Support for this amendment can be found at page 29 through page 32 which describes Figs. 19-22, for example, and portions of which recite, “The illuminated object 314 generates a first light effect (not shown) that is transmitted through a surface of the wall 316 to produce a second light effect 320 that alters the visual appearance of the computer system 310. As should be appreciated, the shape of the light effect 320 typically corresponds to the shape of the illuminated object 314. By way of example, the illuminated object 314 may take on a variety of shapes including simple shapes such as squares and circles or more complex shapes such as an apple (as shown).”

A light pipe is used to transmit the light from the light source onto the illuminated object. This enables the light source to be positioned anywhere within the housing. More specifically, as described at page 31-32,

“the light pipe 384 is configured to distribute the light 383 to locations within a housing where it is needed... The light pipe 384 generally includes a transmissive portion 386 at its interior and a reflective portion 388 at its exterior. Because the exterior of the light pipe 384 is reflective, the light 383 reflects off the sides of the pipe as it travels through the interior of the light pipe. Accordingly, when light 383 is made incident on an inner edge 390 of the light pipe it is directed through the light pipe via the transmissive and reflective portions to an outer edge 392 of the light pipe where it emits the light to another location positioned away from the location of the light source. Any suitable light pipe may be used. For example, the light pipe may be rigid or flexible (as shown). Flexible light pipes allow a wider range of light source positions relative to housing positions. For example, the light source may be positioned in locations that prevent direct exposure to an illuminable portion of the housing, and thus the light pipe may be used to distribute the light to the illuminable portions of the housing by bending around components that prevent direct exposure (e.g., walls, frames and the like). In one embodiment, the light source is housed within an opaque portion of the housing, and a light pipe is used to direct light to an illuminable portion of the housing so as to produce the desired light effect. Furthermore, multiple light pipes may be used to direct light to a plurality of locations around the housing. This may be done with a single light source or multiple light sources.”

It is respectfully submitted that neither Dowling nor Scheinberg taken alone or in any reasonable combination with each other or any of the art of record teach or suggest the combination of limitations recited in claim 78. More specifically, it is respectfully submitted that no reasonable combination of the art of record teaches or suggests illuminating a shaped object within a housing via light transmitted through a flexible light pipe from a light source so as to produce a shaped light effect at an outer surface of the housing that encloses the shaped object, light pipe and light source. Firstly, Dowling does not disclose or suggest illuminating a shaped

object. At most Dowling discloses “making patterns of imperfections on or in the material can create surface lighting effects,” at column 3 lines 30-32, or organizing LEDs to “project patterns or symbols onto the enclosure,” at column 3 lines 40-41. Hence, Dowling uses the arrangement of the LEDs themselves to create a pattern on the enclosure. It should be noted that Dowling’s approach requires that the light emitted from the LEDs have a direct path to the designated portion of the enclosure.

Secondly, it is respectfully submitted that no reasonable combination of the art of record teaches or suggests a light pipe for redirecting light within a computing device housing. Page 8 of the present Final Office Action acknowledges that Dowling “does not teach a light pipe or lens.” Furthermore, it is respectfully submitted that Scheinberg also fails to disclose a light pipe, despite the assertion on page 8 of the present Office Action. The Undersigned was unable to find a specific reference in the present Office Action that indicated any particular disclosure in Scheinberg used by the Examiner to teach a light pipe. Furthermore, after review of Scheinberg, it is respectfully submitted that, at most, Scheinberg discloses a light bulb and a bracket. More specifically, column 4 lines 6-12 of Scheinberg recite, “The clear casing 10 for the electronic component 12 further includes a mechanism 34, for illuminating the enclosure 14. The illuminating mechanism 34 consists of a neon light bulb 36 and a bracket 38 within the enclosure 14, for holding the neon light bulb 36 in place.”

It should be noted that Dowling’s approach does not inhibit the light emitted from the LEDs from reaching other portions of the enclosure, and thus, it is suspected that Dowling’s approach would generate blurry images at the outer surface of Dowling’s enclosure at best. Furthermore, it is suspected that the LEDs would have to be near the inner surface of the enclosure for Dowling’s approach to produce recognizable images with any success.

In contrast, claim 78 of the present application requires a light pipe to redirect light from the light source to the inner surface of the shaped object. This enables the light source to illuminate the inner surface of the shaped object while being positioned anywhere within the housing. Not only does the approach of the present invention allow the light source to be positioned anywhere within the housing, it is also suspected that it would produce a better defined image (light effect). Moreover, the light pipe prevents light from reaching light or heat sensitive areas of the internal components enclosed by the housing.

For at least these reasons, it is respectfully submitted that claim 78 and its associated dependent claims are patentable over the art of record.

Independent claim 84 requires a light guide for redirecting light from a light source to an inner surface of a housing. It is respectfully submitted that claim 84 is patentable over the art of record for at least similar reasons as those described for claim 78, namely, that none of the art of record teach or suggest using a light guide to redirect light from a light source to a designated portion of the inner surface of a housing to produce a light effect at an outer surface of the housing. Additionally, claim 84 also requires that the exit opening of the light guide have a shaped configuration, “wherein the shaped configuration of the exit opening is projected onto the inner surface of the housing to produce the adjustable shaped light effect at the outer surface of the housing that substantially corresponds to the shaped configuration of the exit opening.” It is respectfully submitted that the limitation of an exit opening with a shaped configuration further patentably distinguishes the invention recited in claim 84 from the art of record.

For at least these reasons, it is respectfully submitted that claim 84 and its dependent claims are also patentable over the art of record.

SUMMARY

Applicant believes that all pending claims are allowable and respectfully requests a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,
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